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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,520	08/23/2001	Edward Thornton	22116-9002-01	9109
23409	7590	09/03/2004	EXAMINER	
MICHAEL BEST & FRIEDRICH, LLP 100 E WISCONSIN AVENUE MILWAUKEE, WI 53202			BECKER, DREW E	
			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 09/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/935,520	THORNTON ET AL. <i>[Handwritten Signature]</i>
	Examiner	Art Unit
	Drew E Becker	1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 July 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 6,12,13,16-23 and 27-31 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5,7-11,14,15,24-26 and 32-53 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Election/Restrictions

1. This application contains claims 6, 12-13, 16-23, and 27-31 drawn to an invention nonelected with traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5, 7-8, 14, 24, 33-34, 38-39, 43, and 46-53 are rejected under 35

U.S.C. 102(b) as being anticipated by Lennox III [Pat. No. 5,104,232].

Lennox teaches a vacuum tumbler comprising a cylindrical container with an interior wall and a longitudinal axis of rotation (Figure 1, #11), rib/shelf inserts extending at least one-quarter of the distance across the chamber at its end (Figure 2, #26), a drive (Figure 1, #21), and a vacuum source (column 6, line 51). Phrases such as “the shelf removing all of the products from the liquid at one time” are merely preferred methods of using the claimed apparatus.

3. Claims 46 and 49-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Petsche [Pat. No. 4,214,518].

Petsche teaches a tumbling apparatus comprising a cylindrical, rotatable container with a longitudinal axis (Figure 1, #4), a vacuum source (Figure 3, #138), a drive unit (Figure 1, #34), and shelves (Figure 2, #128 & 134). Phrases such as “the shelf removing all of the products from the liquid at one time” are merely preferred methods of using the claimed apparatus.

4. Claims 46 and 49-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Groves [Pat. No. 5,543,163].

Groves teaches a tumbling apparatus comprising a cylindrical, rotatable container with a longitudinal axis (Figure 1, #32), a vacuum source (Figure 1, #44), a drive unit (Figure 1, #40), and shelves (Figure 1, #36). Phrases such as “the shelf removing all of the products from the liquid at one time” are merely preferred methods of using the claimed apparatus.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5, 7-9, 11, 14-15, 24-26, 32-40, 42-45, 47-48, and 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groves in view of Roberts [Pat. No. 3,134,203].

Groves teaches a vacuum tumbler a cylindrical container with an interior wall and a longitudinal axis of rotation (Figure 1, #32), a drive (Figure 1, #40), a vacuum source (Figure 1, #44), and rib/shelf inserts which extend the length of the container (Figure 1, #36). Groves does not recite the rib/shelf inserts being perforated, the rib/shelf inserts extending the whole way across the chamber, and container projections which hold the rib/shelf inserts. Roberts teaches a tumbling device comprising a single perforated rib/shelf insert extending at whole distance across the chamber (Figure 2, #44) and container projections which hold the rib/shelf insert (Figure 5, #62). It would have been obvious to one of ordinary skill in the art to incorporate the rib/shelf arrangement of Roberts into the invention of Groves since both are directed to tumbling devices, since Groves already included a rotating container with rib/shelf inserts (Figure 1, #36), and since the rib/shelf arrangement of Roberts would have provided lateral loading and unloading, separation of items and fluid, as well as better agitation of the items during tumbling (column 1, lines 9-34).

7. Claims 10 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Groves, in view of Roberts, as applied above, and further in view of Anderson [Pat. No. 2,077,088].

Groves and Roberts teach the above mentioned components. Groves and Roberts do not teach the rib/shelf extending a distance equal to the radius. Anderson teach a mixing device comprising rib/shelves which extend a distance equal to the radius (Figure 2, #14-15). It would have been obvious to one of ordinary skill in the art to incorporate the rib/shelf size of Anderson into the invention of Groves, in view of

Roberts, since all are directed to mixing devices, since Groves already included rib/shelves (Figure 1, #36), since Roberts already included a rib/shelf (Figure 2, #44), and since the rib/shelf size of Anderson would have provided better agitation by causing the products to be carried up and then dropped from one rib/shelf to another as they are rotated in the manner of Groves.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Paumen et al [US 2003/0085234A1] teaches a tumbler with ribs.

Response to Arguments

9. Applicant's arguments with respect to claims 1-5, 7-11, 14-15, 24-26, and 32-53 have been considered but are moot in view of the new ground(s) of rejection.

Regarding the rib/shelf distance of Lennox, the ribs clearly extend at least one-quarter of the distance across the chamber at its end (Figures 2-3, #26).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew E Becker whose telephone number is 571-272-1396. The examiner can normally be reached on Mon.-Thur. 8am-5pm and every other Fri. 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Drew E Becker
Primary Examiner
Art Unit 1761

9-2-04